FACT SHEET

as required by LAC 33:IX.3109 for major LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0036404; AI 3217; PER20060001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** City of Opelousas
Candy Street Wastewater Treatment Facility
P.O. Box 1879
Opelousas, LA 70571

II. **PREPARED BY:** Angela Marse

DATE PREPARED: January 15, 2008

III. **PERMIT ACTION:** LPDES permit LA0036404, AI3217

LPDES application received:	March 31, 2006
LPDES permit issued:	March 1, 2001
LPDES permit expired:	February 28, 2006

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the City of Opelousas.

B. The permit application does indicate the receipt of industrial wastewater.

C. The facility is located at 2284 Candy Street in Opelousas, St. Landry Parish.

D. The treatment facility consists of a bar screen and grit removal followed by activated sludge basins, final clarifiers, tertiary filters, and post aeration. The facility also has aerobic sludge digesters. Dried sludge is disposed of at the St. Landry Parish Landfill. Disinfection is by ultraviolet light.

E. Outfall 001

Discharge Location:	Latitude 30°30'30" North Longitude 92°05'33" West
Description:	treated sanitary wastewater
Design Flow:	3.3 MGD

Type of Flow Measurement which the facility is currently using:

V-Notch Weir with a Continuous Flowmeter

V. RECEIVING WATERS:

The discharge is by pipe into Bayou Yarbor, thence into Bayou Callahan, thence into the Vermilion River in segment 060801 of the Vermilion - Teche River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of Bayou Yarbor is 0.88 cfs.

The **hardness value** is 153.33 mg/l and the **fifteenth percentile value for TSS** is 10.5 mg/l.

The designated uses and degree of support for Segment 060801 of the Vermilion - Teche River Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Not Supported	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Not Supported	Not Supported	N/A	N/A	N/A	Full

[1/] The designated uses and degree of support for Segment 060801 of the Vermilion - Teche River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Subsegment 060801 was previously listed as impaired for turbidity, siltation, total suspended solids, organic enrichment/low DO, nutrients, carbofuran, nitrogen, phosphorus, and pathogen indicators. The following Total Maximum Daily Load Studies (TMDLs) have been developed to address impairments. Turbidity and TDS were delisted in October, 2000. Even though TMDLs have been completed for this subsegment, the Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving waterbodies based upon additional TMDLs and/or water quality studies. A reopener clause has been included in the permit.

The following TMDL's have been established for subsegment 060801:

TMDL for the Pesticide Carbofuran in the Mermentau River and Vermilion-Teche River Basins (March, 2002)
The Candy Street Wastewater Treatment Plant does not discharge Carbofuran. There are no dischargers of Carbofuran in the Mermentau River Basin and only one point source discharger for Carbofuran in the Vermilion-Teche River Basin. A waste load allocation was done for that discharger only.

TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin (May, 2001)
This TMDL is expressed in terms of percent reduction needed to achieve a target TSS load for the listed subsegments. A target TSS was found by comparing TSS to a parameter like turbidity for which there is a numeric water quality standard. A simple regression model was used to determine a target TSS value of 103 mg/l for subsegment 060801. Since the Candy Street Wastewater Treatment Plant is permitted below the target TSS, no changes in the permit will result from the TMDL. Seasonal TSS limits required by the Opelousas Bayou Yarbor WLA (1988) will remain in the permit.

Vermilion River TMDL for Fecal Coliform for Subsegments 060801 and 060802 (January, 2001)
The Louisiana Water Quality Regulations require point source dischargers of treated sanitary wastewater to maintain a fecal coliform count of 200 cfu/100ml in their effluent. In other words, they must meet the standard at the end-of-pipe. No change was needed in the permit requirements based upon the wasteload allocation resulting from this TMDL.

Vermilion River TMDLs for Dissolved Oxygen and Nitrogen for Subsegments 060801 and 060802 (January, 2001)
A TMDL was developed for these two subsegments in 1987 and approved by EPA. The TMDL was reevaluated in by LDEQ in 1999 and determined appropriate. A separate wasteload allocation (WLA) study was conducted in 1988 specifically for Bayou Yarbor. Seasonal effluent limits were recommended by this study and have been in the permit for several permit cycles now. They include a dissolved oxygen requirement and an ammonia nitrogen limit. Because the TMDL issued in 2001 did not require more stringent effluent limits, effluent limits in the proposed permit will remain the same as in the previous permit.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 060801 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between LDEQ and the FWS, no further informal (Section7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered species or candidate species or their critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001
Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

The following limits shall be applicable during the months of April through November.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
$CBOD_5$	275	10 mg/l	15 mg/l	Opelousas-Bayou Yarbor Waste Load Allocation. December 20, 1988.
TSS	275	10 mg/l	15 mg/l	From the previous permit. There is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. A Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. This limit was first in the NPDES permit issued 11/10/92.
Ammonia-Nitrogen	55	2 mg/l	4 mg/l	Opelousas-Bayou Yarbor Waste Load Allocation. December 20, 1988.
Dissolved Oxygen	N/A	6.0 mg/l	N/A	Opelousas-Bayou Yarbor Waste Load Allocation. December 20, 1988.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Priority Pollutants

The previous permit contained a water quality based limit for cyanide and a reporting requirement for copper. The following table shows DMR data beginning in October, 2005 lasting through November, 2007 for priority pollutants.

Date	Copper (lb/day)	Cyanide (lb/day)
12/2005	0	0
3/2006	0	0
7/2006	0	0
1/07	0	0
6/2007	0	0
11/2007	0	0

Zero was reported for copper for all DMRs in the two year period in which DMRs were reviewed. This means analytical results were below the detection level or non-detectable. Copper was not detected in the analysis submitted with the application either. Therefore, the reporting requirement for copper has been removed from the permit.

Cyanide was not detected in the effluent for DMR reporting. Although cyanide was present in the analysis submitted with the application, it was below the required EPA minimum quantification level (MQL). Therefore, the water quality based limit for Cyanide has been removed from the permit.

Zinc was greater than the EPA MQL in the analytical data submitted with the application. Therefore, a water quality spreadsheet (Appendix B) was used to determine if a water quality based limit was needed in the permit for zinc. The spreadsheet determined a limit was not needed in the permit.

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Final Effluent Limits:

OUTFALL 001
Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

The following limits shall be applicable during the months of December through March.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
$CBOD_5$	550	20 mg/l	30 mg/l	Opelousas-Bayou Yarbor Waste Load Allocation. December 20, 1988.
TSS	550	20 mg/l	30 mg/l	From the previous permit, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. (There is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility.)
Ammonia-Nitrogen	275	10 mg/l	20 mg/l	Opelousas-Bayou Yarbor Waste Load Allocation. December 20, 1988.
Dissolved Oxygen		6.0 mg/l	N/A	Opelousas-Bayou Yarbor Waste Load Allocation. December 20, 1988.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Toxicity Characteristics

Based on information contained in the permit application, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. The State has established a narrative criteria which, in part, states that 'No substances shall be present in the waters of the State or the sediments underlying said waters in quantities alone or in combination will be toxic to human, plant, or animal life ...' (LAC 33:IX.1113.B.5).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are listed on the following page.

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No LA0036404 **Section E** for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
Chronic static renewal 7-day survival & reproduction test using Ceriodaphnia dubia (Method 1002.0)	1/quarter
Chronic static renewal 7-day survival & growth test using fathead minnow (Pimephales promelas) (Method 1000.0)	1/quarter

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 27%, 36%, 48 %, 64%, and 85%. The low-flow effluent concentration (critical low-flow dilution) is defined as 85% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section E** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section E** of the permit.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0036404: Issued: February 1, 2001
Expired: January 31, 2006

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
$CBOD_5$				
April-November	10 mg/l	15 mg/l	2/week	6-hr composite
December-March	20 mg/l	30 mg/l	2/week	6-hr composite
TSS				
April-November	10 mg/l	15 mg/l	2/week	6-hr composite
December-March	20 mg/l	30 mg/l	2/week	6-hr composite
Ammonia-Nitrogen				
April-November	2 mg/l	4 mg/l	2/week	6-hr composite
December-March	10 mg/l	20 mg/l	2/week	6-hr composite
Dissolved oxygen	---	6 mg/l	2/week	Grab
Fecal Coliform Colonies	200	400	2/week	Grab
pH (standard units)	---	---	2/week	Grab
Copper	report	report	1/6months	24-hr composite
Total Cyanide	0.11 lb/day	0.26 lb/day	1/quarter	24-hr composite

The permit contains pretreatment language.
The permit contains biomonitoring.
The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the most recent inspection performed for this facility.

Date – February 7, 2007
Inspector - LDEQ
Findings and/or Violations -

1. The collection system has had numerous overflows.
2. The sand filter is still inoperable and has been down over a year.
3. There were several small leaks in the treatment system that were leaking untreated sewage to areas outside of the plant.
4. Problems with UV system led to several recent excursions.

B) Compliance and/or Administrative Orders

A review of the files indicates no recent enforcement actions administered against this facility. EPA has retained enforcement authority for Opelousas. At the time the application was submitted, the City of Opelousas remained under Administrative Order Docket No. CWA-06-2004-1806.

C) DMR Review

A review of the discharge monitoring reports for the period beginning **October, 2005** through **September, 2007** has revealed the following violations:

Effluent Characteristic	Number of Violations
Fecal Coliform	10

XII. ADDITIONAL INFORMATION:

PERMIT REOPENER CLAUSE

In accordance with LAC33:IX.2707.C, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
b) Controls any pollutant not limited in the permit; or
c) Requires reassessment due to change in 303(d) status or waterbody; or
d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving waterbody.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 3.3 MGD.

Effluent loadings are calculated using the following example:
BOD: 8.34 gal/lb x 3.3 MGD x 10 mg/l = 275 lb/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between **1 MGD** and **5 MGD**.

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language will put in the permit.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Opelousas, Candy Street Wastewater Treatment Facility, April 3, 2006.